

# Famous Pilots Challenge

This is an interactive learning tool that is linked to Why Fly? on the Topic Hot List. The purpose of the Treasure Hunt “Famous Pilots Challenge” is to quiz students in grades 6-12 with their knowledge of historically famous aircraft and spacecraft pilots with the goal of increasing their knowledge of these “icons of aviation.” It is also desired that as students become more aware of the attributes and dreams of these courageous men and women, they in turn will become inspired to pursue new heights in their own careers and lives.

The procedure for PIC is for students to be presented the first of a series of clues that describe one element that gave rise to a pilots’ fame. This first clue is the most difficult in revealing who the pilot is, so the information is elusive and not well documented. Each successive clue in the series states better-known facts and becomes increasingly easier to ascertain who the pilot is that is being described. The student gets one chance to type in a name of the pilot he or she thinks is being described into a text box for each clue that is read. As soon as the correct pilot is identified, the student receives a score with the highest point value ascribed to the least number of clues needing to be read. Also, a photograph of and story about the pilot is brought up on the screen for the student to learn more. After completing the clues for all of the famous pilots presented, the student’s total score is given as a percentage and indicators for which of the pilots were best or least known are shown with the number of clues necessary for each.

*Test your knowledge of famous pilots by reading through the lists of pilot clues to determine who is being described.*

1. This pilot was born on December 18, 1912.
2. He earned the rank of Brigadier General in the U.S. Army in 1940.
3. He graduated from West Point in 1936 making him the first black cadet to do so.
4. This aviator was the first black pilot to earn his wings.
5. As leader of the 99<sup>th</sup> Pursuit Squadron at Tuskegee he lead the training of other black pilots.
6. Under his command, one of his pilots, Lt. Charles Hall, shot down a FW-190, and became the first black pilot to down an Axis plane during WWII.
7. On October 27, 1949 he was promoted to Brigadier General, the Air Force's first black General officer.
8. In December 1957 he was promoted to Major General and received the position of Deputy Chief of Staff, Operations, for the US Air Force in Europe.
9. In 1965 he received his third star and assigned as Chief of Staff of the US Forces and of the UN Forces in Korea.
10. After his retirement, he served in several civilian aviation positions and sat on numerous boards and commissions.

Benjamin O. Davis

<http://www.nationalaviation.org/enshrinee/davis.html>

1. The aircraft was fueled with liquid oxygen and dilute ethyl alcohol.
2. The future of military aviation was on the line.
3. Col. Albert Boyd selected Bob Hoover as his backup.
4. Engineers on the ground developed a "moving tail" as a fix.
5. The aircraft was flown over a dry lakebed that would later become Edwards Air Force Base.
6. He made the quote "I'm still wearing my ears and nothing else fell off, neither."
7. The aircraft was painted a brilliant orange for better visibility.
8. The XLR-11 engine was a four-chamber rocket nicknamed "Black Betsy."
9. The Bell X-1, "Glamorous Glennis," was flown at 42,000 feet on October 14, 1947.
10. As the most famous pilot since the Wright Brothers, he was the first to break through the "Wall of Air" by surpassing 1.0 Mach.

Chuck Yeager

<http://www.capstonestudio.com/supersonic/>

<http://www.hq.nasa.gov/office/pao/History/x1/yeagphoto.html>

1. This pilot was born on January 26, 1892, in Atlanta, Texas.
2. Before becoming a pilot, she worked as a manicurist in Chicago.
3. Her brother's teasing led her to a career in aviation.
4. Because of discrimination at the time in the United States, this pilot traveled to France to earn her wings.
5. Her goal was to establish a flying school for African Americans.
6. Her most famous quote is, "The air is the only place to be free from prejudices."
7. She was known for her stunt flying.
8. She was killed in a freak accident when she fell out of her plane during a mechanics check up.
9. In 1995, a postage stamp was issued in her honor.
10. Each year on the anniversary of her death, African American pilots fly over her grave in Chicago to drop flowers in her honor.

Bessie Coleman

[http://www.nasm.edu/nasm/aero/women\\_aviators/bessie\\_coleman.htm](http://www.nasm.edu/nasm/aero/women_aviators/bessie_coleman.htm)

1. This pilot was born on August 5, 1930 in Wapakoneta, Ohio.
2. He earned a BS degree in aeronautical engineering from Purdue University, and has a masters degree in aerospace engineering from the University of Southern California.
3. From 1949 to 1952, he was a naval aviator.
4. Upon leaving military service, he became a test pilot, during which he was chosen to be a member of the astronaut corps.

5. As a test pilot, he made 7 flights in the X-15 aircraft, and was able to attain an altitude of 63,198 meters (207,500 feet).
6. Though he was on the backup crew of many previous flights, such as command pilot for Gemini 5, his first space flight occurred in 1966 aboard Gemini 8, during which he and fellow astronaut David Scott successfully performed the first docking in space between two vehicles.
7. He was awarded the Presidential Medal of Freedom in recognition of his accomplishments and his contributions to the space program.
8. He was commander for Apollo 11.
9. He was the first human to land a craft on the Moon.
10. As he became the first human to touch the Moon's surface, he spoke the unforgettable phrase "That's one small step for man; one giant leap for mankind."

Neil Armstrong

[http://starchild.gsfc.nasa.gov/docs/StarChild/whos\\_who\\_level2/armstrong.html](http://starchild.gsfc.nasa.gov/docs/StarChild/whos_who_level2/armstrong.html)

1. This pilot was born in 1894 and shared a small home with his father in Columbus, Georgia.
2. His grandfather had been a slave and his father often spoke of France as a country where whites and blacks were treated as equals. Together, these two fueled Bullard's dream of going to France.
3. He enlisted in the French Foreign Legion shortly after the beginning of World War I.
4. This pilot then applied for pilot training with the French air service. Accepted on the basis of combat heroism, he became the first African American fighter pilot.
5. During World War I he became a distinguished fighter pilot.
6. When the United States entered the war in 1917, he volunteered his services to the Army Air Service. At the time, it barred African Americans from flying. Thus, the Army denied him the opportunity to fly for his country.
7. He would remain in France during World War II as a member of the Underground until France surrendered to the Germans. The Germans seized his property, forcing him to return home to the United States at the age of forty.
8. America became familiar with his exploits when Eleanor Roosevelt wrote of his valor in her weekly column: "He had dreamed of better places and conditions," she wrote, and "he went to better places and conditions."
9. He was awarded many medals by France, including its highest honor--the Legion d'Honneur. It is the equivalent to the U.S. Medal of Honor.
10. He was able to fly with the French air service--nearly 25 years before the first African American pilots graduated from Air Corps pilot training (1942) at Tuskegee Institute in Alabama.

Eugene J. Bullard

<http://www.nasm.edu/nasm/pa/nasmnews/history/bhistory/BULLARD.HTM>

1. This pilot was born in East Derry, New Hampshire in 1923.
2. He received a BS degree from the U.S. Naval Academy in Annapolis in 1944, as well as an honorary masters degree from Dartmouth and two honorary doctorates, one of science and the other humanities.
3. He retired as Rear Admiral from the U.S. Navy.
4. Named as one of the nation's original seven Mercury astronauts in 1959, he became the first to carry America's banner into space on May 5, 1961, riding a Redstone rocket on a 15-minute suborbital flight in the Freedom 7 Mercury capsule.
5. With Deke Slayton, another original Mercury astronaut, he wrote *Moon Shot: The Inside Story of America's Race to the Moon* (1994).
6. He had to overcome an inner ear problem called Meunier's syndrome that grounded him for several years following his initial pioneering flight.
7. His second space flight was as spacecraft commander on Apollo 14.
8. He died on July 21, 1998 at the age of 74..
9. He was the fifth man to walk on the Moon, and the oldest, at the age of 47.
10. On May 5, 1961, under the U.S. space program Project Mercury, he became the first American to be launched into space.

Alan Shepard, Jr.

<http://www.nasa.gov/shepard.html>

1. This pilot was born November 19, 1956, in Elmira, New York.
2. She received a BA degree in mathematics and economics from Syracuse University and a Master of Science degree in operations research from Stanford as well as a Master of Arts degree in space systems management from Webster University.
3. She graduated in 1979 from Air Force Undergraduate Pilot Training at Vance AFB, Oklahoma, where she was a T-38 instructor pilot until 1982.
4. From 1986 to 1989, she was assigned to the U.S. Air Force Academy in Colorado, where she was an assistant professor in mathematics and a T-41 instructor pilot.
5. She was selected for the astronaut program while attending the Air Force Test Pilot School at Edwards AFB, California, from which she graduated in 1990.
6. She served as pilot of STS-63, the first flight of the new joint Russian-American Space Program.
7. A veteran of three space flights, she served as pilot on STS-63 (February 3-11, 1995) and STS-84 (May 15-24, 1997), and was the commander on STS-93 (July 22-27, 1999).
8. She currently works in Mission Control as a spacecraft communicator, and will serve as Commander of STS-114 scheduled to launch in late 2002..
9. Her favorite quote is: "Dream the impossible dream!"
10. She was the first woman pilot of a Space Shuttle mission.

Eileen Collins

<http://www.jsc.nasa.gov/Bios/htmlbios/collins.html>

1. This pilot was born on January 21, 1906 in Glasgow, Kentucky.
2. Before she was a pilot, she was a teacher.
3. Influenced by the aviatrix Bessie Coleman, she started taking flying lessons in 1934.
4. In 1937 she received her pilot's license and that same year, she received a master's degree from Northwestern University.
5. Also in 1937, she co-founded the National Airmen's Association of America with her flight instructor, Cornelius R. Coffey. The Association's goal was to promote African-American aviation.
6. In 1937, she became the first African American woman to receive a commercial pilot's license.
7. In 1938, they started the Coffey School of Aeronautics, where approximately two hundred pilots were trained in the next seven years. Some of those pilots later became part of the 99<sup>th</sup> Pursuit Squadron at Tuskegee Institute, also known as the "Tuskegee Airmen".
8. She lobbied Washington for inclusion of African-Americans in the Civilian Pilot Training Program and in the Army Air Corps, and, in 1941, she became a training coordinator for the Civil Aeronautics Administration and a teacher in the Civilian Pilot Training Program.
9. She became the first African-American member of the Civil Air Patrol.
10. In 1972, she became a member of the Women's Advisory Committee on Aviation in the Federal Aviation Agency.

Willa Brown

<http://www.netsrq.com/~dbois/brown-wb.html>

1. This aviatrix was born on April 24, 1959, in West Point, New York.
2. She received a bachelor of arts degree in biochemistry from San Francisco State University in 1981, and a doctorate in medicine from the University of Washington in 1985.
3. She received certification in Aerospace Medicine from the School of Aerospace Medicine at Brooks Air Force Base, Texas, in 1988.
4. Her honors include: Outstanding Young Women of America; National Defense Service Medal; Air Force Achievement Medal; United States Air Force (USAF) Air Staff Exceptional Physician Commendation; National Technical Association Distinguished Scientist Award; Commendation Marin County Board of Supervisors; and Commendation Novato School Board.
5. Her medical training was sponsored by the Health Professions Scholarship Program, through which she received her commission as an officer with the United States Air Force, and subsequently was awarded her board certification in family practice.
6. During May 1989, while a flight surgeon assigned to the 48th Tactical Hospital, United Kingdom, Dr.

7. She volunteered to serve as the Air Force Medical Liaison Officer for the STS-30 Atlantis Shuttle Mission to test the Magellan Spacecraft.
8. NASA selected this aviatrix in April 1996, to report to the Johnson Space Center in August 1996.
9. Having completed two years of training and evaluation, she is qualified for flight assignment as a mission specialist.
10. She has been awarded many Air Force honors and is involved in the Boys and Girls Club of America, the American Academy of Family Physicians, and the Third Baptist Church.

Dr. Yvonne Cagle

<http://www.jsc.nasa.gov/Bios/htmlbios/cagle.html>

1. This pilot was born on May 26, 1951 in Los Angeles, California.
2. She received a BS in physics and a BA in English from Stanford University.
3. Later, she received an MS and a Ph.D. in physics.
4. She was selected for astronaut training in 1978, and as part of her training, she was a member of the support crew for both the second and third space shuttle flights, and worked in mission control as a capsule communicatory (CAPCOM) for those two missions.
5. Her first flight was aboard the space shuttle Challenger as a mission specialist on STS-7 in 1983, when the five-member crew deployed communications satellites for Canada and Indonesia, performed the first satellite deployment and retrieval with the shuttle's robot arm, and conducted materials and pharmaceutical research.
6. Her second space flight was also aboard Challenger, on STS-41G (the thirteenth space shuttle flight), in October 1984.
7. She was in training for STS 61-M at the time of the *Challenger* accident, and served on the Presidential Commission investigating the accident.
8. She is currently a professor of physics at the University of California at San Diego.
9. Books she has written include the children's book *To Space and Back* and the books *Voyager: an Adventure to the Edge of the Solar System* and *The Third Planet: Exploring the Earth from Space*.
10. She was the first American woman in space.

Sally Ride

<http://www.quest.arc.nasa.gov/space/frontiers/ride.html>

1. This pilot learned to love nature, the outdoors, solitude, and developed a passion for collecting and analyzing things.
2. Fascinated with aviation, he earned his pilot's license, and in 1923 bought a Jenny to take up barnstorming.
3. In 1924, he entered a U.S. Army flying school at San Antonio, Texas.

4. He graduated first in his class the following year, and then became the first airmail pilot between Chicago, Illinois, and St. Louis, Missouri.
5. In an attempt to win the Orteig prize, he considered buying the Wright Bellanca for only \$15,000, a great discount from its cost of \$25,000, but changed his mind when the owner insisted on naming the pilot himself.
6. His plane was known as a "two-ton flying gas tank" because it's designer sacrificed every possible bit of weight for more fuel capacity - no parachute, no radio, no brakes, not even a forward-facing window (a small periscope would do).
7. Powered by a state-of-the-art 223hp Wright Whirlwind J-5C engine, the plane could cruise for 4,200 miles.
8. He wrote the book "We" in one month, which became an immediate best seller.
9. He was the first man to fly solo across the Atlantic in 1927.
10. He flew the Ryan monoplane *Spirit of St. Louis*.

Charles Lindbergh - The Lone Eagle

<http://www.acepilots.com/lindbergh.html>

1. This aviatrix was born on May 10, 1958 in Los Angeles, CA, but considers Las Mesa, California to be her hometown.
2. She received her bachelor of science degree in physics from San Diego State University, and a master of science degree and doctorate in electrical engineering from Stanford University.
3. She is a classical flutist and private pilot, and also enjoys volleyball and bicycling.
4. Selected by NASA in January 1990, she became an astronaut in July 1991.
5. A veteran of four space flights, this pilot has logged over 978 hours in space.
6. She is a co-inventor on three patents for an optical inspection system, an optical object recognition method, and a method for noise removal in images.
7. Her many awards include: Women in Aerospace Outstanding Achievement Award, The Hispanic Engineer Albert Baez Award for Outstanding Technical Contribution to Humanity, the Hispanic Heritage Leadership Award, and San Diego State University Alumna of the Year.
8. She has presented numerous papers at technical conferences and in scientific journals.
9. She was a mission specialist on STS-56 (1993), was the Payload Commander on STS-66 (1994), and was a mission specialist and flight engineer on STS-96 (1999) and STS-110 (2002).
10. Married to Coe Fulmer Miles of Molalla, Oregon. They have two children.

Ellen Ochoa

<http://www.jsc.nasa.gov/Bios/htmlbios/ochoa.html>

1. This pilot was born on July 24, 1897 in Atchison, Kansas.
2. She served as a nurse in World War I, and took her first ride in an airplane in 1920.



3. Within a few days, she took her first flying lesson in a Curtiss JN-4 Jenny, and six months later, she bought her own airplane, a yellow Kinner Airster that she dubbed "The Canary."
4. She was a charter member and first president of the "Ninety Nines," an organization of women in aviation, so named for the original number of members.
5. Amy Guest, after purchasing a Fokker F7 trimotor from Commander Richard Byrd, hired George Putnam to look for a suitable women pilot after her family's objection to fly it herself, who selected and introduced her as "Lady Lindy".
6. She was the first person to solo from Hawaii to California, in 1935.
7. She was the first woman to fly across the Atlantic, in 1928.
8. On May 21, 1932, five years to the day after Lindbergh's flight, she took off in a Lockheed Vega, in an attempt to become the second person after Lindbergh (and first woman) to fly solo across the Atlantic.
9. With her navigator, Fred Noonan, her Lockheed Model 10E Electra, equipped with extra-large gas tanks, attempted an around-the-world flight.
10. She was the world's most famous female aviator who disappeared in 1937, as she attempted to become the first woman to fly around the world.

Amelia Earhart

<http://www.acepilots.com/earhart.html>

1. This aviator was born in Philadelphia, Pennsylvania, on November 22, 1942.
2. His hobbies include reading, swimming, jogging, racquetball, handball, and scuba.
3. He received a bachelor of science degree in aerospace engineering from the Pennsylvania State University in 1964; a master of science degree with distinction in aerospace engineering from the Air Force Institute of Technology in 1974; a doctor of philosophy in aerospace engineering with a minor in laser physics from the Air Force Institute of Technology in 1978, and a master in business administration from the University of Houston, Clear Lake, in 1987.
4. He attended pilot training at Williams Air Force Base, Arizona, and received his pilot wings in January 1966.
5. He flew 144 combat missions.
6. In August 1972, he entered the Air Force Institute of Technology residency school at Wright-Patterson Air Force Base, Ohio.
7. He has logged over 5,200 hours jet flight time.
8. This pilot became a NASA astronaut in August 1979.
9. On August 30, 1983, he became NASA's first African-American astronaut.
10. With the completion of his fourth flight, he has logged over 688 hours in space.

Guion S. Bluford, Jr.

<http://www.jsc.nasa.gov/Bios/htmlbios/bluford-gs.html>



1. This pilot was born in Texas on November 22, 1898, and was known as a naturally gifted flier.
2. Convicted of stealing a car in 1921, he was paroled after the first year out of a ten-year sentence.
3. He lost his left eye in an oil field accident in the mid-1920's, and used the \$1800 settlement to buy his first airplane.
4. He became the personal pilot of F.C. Hall, a wealthy Oklahoma oilman, and had use of Hall's personal plane, an open cockpit Travel-Air biplane.
5. Hall bought a Lockheed Vega, largely for our mystery pilot's use, nicknamed *Winnie Mae* for the oilman's daughter.
6. He first achieved national prominence in 1930, when he won the National Air Race Derby, from Los Angeles to Chicago.
7. Also a scientific innovator, he developed a pressure suit that permitted him to fly the *Winnie Mae* into the stratosphere, discovering the jet stream in the process.
8. In 1931, he flew around the world in the *Winnie Mae* with his navigator, Harold Gatty, in eight days.
9. In 1933, he repeated his round-the-world flight, but this time did it solo, completing the flight in only seven days, nineteen hours.
10. Accompanied by the famous humorist Will Rogers, they crashed at Point Barrow, Alaska on August 15, 1935.

Wiley Post

<http://www.acepilots.com/post.html>

1. This pilot was born in Winchester, Virginia, in 1888 and graduated from the United States Naval Academy in 1912.
2. Designated a naval aviator in 1918, he was promoted to the rank of lieutenant commander, and in 1925 he commanded the naval air unit of the expedition to Greenland led by American explorer Donald Baxter MacMillan.
3. In 1927 he flew the first transatlantic airmail from New York to France with Norwegian American Bernt Balchen and Americans Bertrand B. Acosta and George O. Noville.
4. During his first expedition to Antarctica, from 1928 to 1930, Byrd established a base, Little America, on the Bay of Whales.
5. He led a second expedition to the Antarctic from 1933 to 1935, conducting meteorological and auroral research alone in a shack for five months while the expedition party surveyed 1,165,500 sq km (450,000 sq mi) of territory and undertook research in many branches of science.
6. During his third expedition, from 1939 to 1940, four exploratory flights were made, resulting in many discoveries. In a fourth Antarctic expedition from 1946 to 1947, he explored and mapped approximately 2,188,500 sq km (845,000 sq mi) of territory, about one-third of it newly discovered.

7. In 1955 he was appointed head of "Operation Deep-Freeze," an Antarctic expedition organized by the United States in connection with the International Geophysical Year (1957-1958).
8. He received the Medal of Honor for being the first person to fly over the North Pole.
9. Books he wrote included *Skyward* (1928), *Little America* (1930), *Discovery* (1935), *Exploring with [his last name]* (1937), and *Alone* (1938).
10. He was the first to fly over the South Pole in 1929 in a Ford Trimotor aircraft.

Richard Byrd

<http://www.south-pole.com/p0000107.htm>

1. This pilot was born July 18, 1921 in Cambridge, Ohio.
2. He has a Bachelor of Science degree in Engineering and has received honorary doctoral degrees from nine colleges or universities.
3. He entered the Naval Aviation Cadet Program in March 1942 and was graduated from this program and commissioned in the Marine Corps in 1943.
4. During his World War II service, he flew 59 combat missions.
5. In Korea he flew 63 missions with Marine Fighter Squadron 311, and in the last nine days of fighting in Korea he downed three MIG's in combat along the Yalu River as an exchange pilot with the Air Force in the F-86 Sabrejet.
6. In July 1957, while project officer of the F8U Crusader, he set a transcontinental speed record from Los Angeles to New York, spanning the country in 3 hours and 23 minutes and thereby being the first transcontinental flight to average supersonic speed.
7. He was assigned to the NASA Space Task Group at Langley Research Center, Hampton, Virginia, in April 1959 after his selection as a Project Mercury Astronaut.
8. He was promoted to the rank of Colonel in October 1964 and retired from the Marine Corps, and was a business executive from 1965 until his election to the United States Senate in November 1974.
9. On February 20, 1962, he piloted the Mercury-Atlas 6 "Friendship 7" spacecraft on the first manned orbital mission of the United States, orbiting the earth three times.
10. He flew aboard the STS-95 Discovery in 1998, a 9-day mission during which the crew supported a variety of research payloads including deployment of the Spartan solar-observing spacecraft, the Hubble Space Telescope Orbital Systems Test Platform, and investigations on space flight and the aging process.

John Glenn

<http://www.jsc.nasa.gov/Bios/htmlbios/glenn-j.html>

## **Famous Pilots**

### **Notes to Educators and Parents**

“Famous Pilots Challenge” is an interactive learning tool for 7 – 12 graders that is intended to provide students with the opportunity, through a quiz activity, to broaden their knowledge about historically famous aircraft and spacecraft pilots. The activity can be done in school or with home-schooled students. The activity is good for individual, partner or group work. With the instant feedback, this is a self-motivating activity. The purpose of the activity is for students to become more aware of the attributes and dreams of these courageous men and women, which in turn will inspire them to pursue new heights in their own careers and lives.

### **Standards**

#### **History and Nature of Science**

#### **Content Standard G**

All students should develop an understanding of science as a human endeavor